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BESS Newsletter

Biosystems Engineering and Soil Science
Publications and Other Works

1-23-2012

BESS 1/23/12

Department of Biosystems Engineering and Soil Sciences

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Welcome back!

Vol. 5 No. 1

January 23, 2011

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<http://bioengr.ag.utk.edu>

Click Below

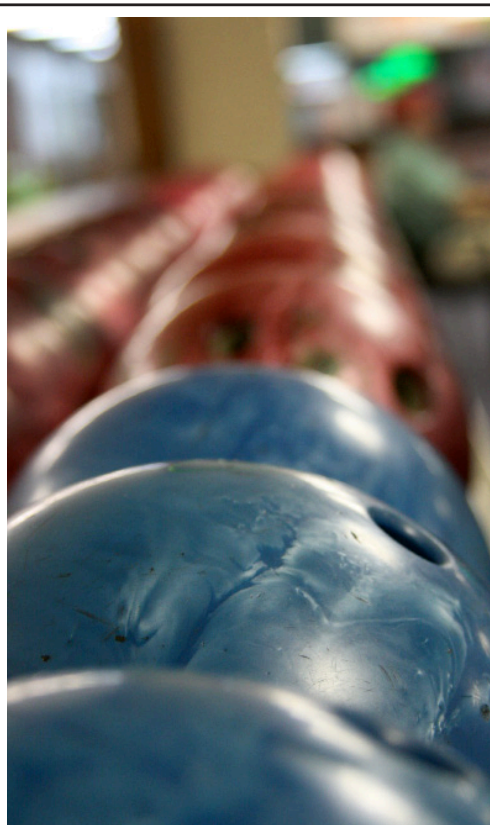
For Important News on:

News

Events

Funding

Facebook



ASABE bowling night pits professors against students

The students and faculty of BESS met for a friendly game of bowling and camaraderie November 29 down under at the University Center. The event was sponsored by UT's chapter of the American Society of Agricultural and Biological Engineers.

Drs. Drumm, Logan and Tyner squared off against club members before breaking off into mixed teams. The event serves as a means to bridge the gap between students and professors.

While there weren't any perfect games played, the event provided hours of laughs.

Down under bowling is open almost every day of the week, and games are \$2.00 for faculty and students.

Please submit items
to Rob Baldus

rbaldus@utk.edu

BESS NEWS is issued on
1st & 3rd Mondays of each
month.

Archived issues post to our
departmental website.

To subscribe (or unsubscribe),
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BESS

BIOSYSTEMS ★ ENGINEERING ★ SOIL SCIENCE

EVENTS

THE UNIVERSITY of
TENNESSEE **UT**
INSTITUTE of
AGRICULTURE
**UPCOMING
EVENTS**



First ASABE meeting of 2012

- 1/23 5:15 PM BSE room 266

Rich Fisher: Birds, Bugs, Bunnies and Bombs

- 1/26 12:00 PM in the Center for Renewable Carbon

BESS Research Symposium

- 4/17 3:30 PM Hollingsworth Auditorium

BESS Awards Banquet

- 4/18 6:00 PM in Hollingsworth Auditorium

Above: Drs. Logan and Tyner keep score against the students. **Below Left:** Senior Erick Foster bowls with perfect form. **Below Right:** Sophomores Stephanie Kerrigan and Alysse Ness take a break from rolling strikes.



BESS celebrates the Holidays

BESS faculty and students gathered Dec. 15 to celebrate the holidays. Alumni and administration also attended in the reference room of the biosystems engineering building. The celebration included a pot-luck lunch and punch.



Above: Dr. Brian Leib and Dr. Mark Radosevich



Above: Gary Honea and Mark Young



Above front: Laura Nixon, Dr. Amy Johnson, (Dr. Andrea Ludwig & Dr. Jenn DeBruyn (obscured)), Dr. Bill Brown, Dean AgResearch, and Professor Emeritus Jim Wills



Above left to right: Jay Bevinngton, Dr. Willie Hart, Dr. Houston Luttrell, and Dr. Luther William

Job Opportunity and Congratulations

Job Opportunity with USDA

The USDA, Agricultural Research Service, Application Technology Research Unit in Wooster, Ohio, is seeking a POSTDOCTORAL RESEARCH ASSOCIATE (Agricultural, Electrical, or Mechanical Engineer) for a 2 YEAR APPOINTMENT. Ph.D. is required. Salary is commensurate with experience plus benefits. Citizenship restrictions apply. The incumbent will be a member of a research team to develop precision sprayers delivering agrichemicals and bio-products for ornamental nursery and fruit crops.

The primary research responsibility is to use advanced laser/image sensors to detect canopy characteristics, write programs to analyze sensor signals, develop a real-time electro-mechanical control system for variable rate applications, establish relationship between droplet size and air velocity, and conduct laboratory and field experiments to achieve precise and accurate applications of pest and disease control agents to intended targets. Knowledge of current methods to detect the size, shape and density of field objects, including image analysis, optical sensors, laser scanners and computer programs is highly desirable.

Refer to <http://www.usajobs.gov/GetJob/ViewDetails/303306000> for complete application instructions and the full text announcement (RA-11-079-L). Send application materials and references to Dr. Heping Zhu, USDA/ARS Application Technology Research Unit, Edgington Hall, OARDC, Wooster, OH 44691 or e-mail (heping.zhu@ars.usda.gov). This position is open until filled. USDA/ARS is an equal opportunity provider and employer.



Congratulations to these BESS Alumni who are now Professional Engineers!

The following Biosystems Engineering alumni were listed in the Fall/Winter newsletter of the Tennessee Board of Architectural and Engineering Examiners as having recently

Passed the Principles and Practice of Engineering Examination and are registered Professional Engineers (P.E.)

Adam Byard

Aaron Crenshaw

Aaron M. Kline

Brian Marsh

Funding Awards

<u>PI-Last Name</u>	<u>PI-First Name</u>	<u>Co-PI Last Name</u>	<u>Co-PI First Name</u>	<u>Department</u>	<u>Agency</u>	<u>Amount</u>
Hawkins	Shawn	Walker	Forbes	Biosystems Engineering and Soil Science	Tennessee Department of Agriculture	40,504.00
		Clark	Christopher	Agricultural and Resource Economics		
		Lambert	Dayton	Agricultural and Resource Economics		
Vail	Karen			Entomology and Plant Pathology	USDA APHIS	14,000.00
Lee	Jaehoon			Biosystems Engineering and Soil Science		
Yoder	Daniel			Biosystems Engineering and Soil Science	USDA ARS	11,752.00
Ayers	Paul			Biosystems Engineering and Soil Science	Colorado State	74,398.00
Harte	Federico	Mount	John	Food Science and Technology	Dairy Research Institute	73,703.00
Buschermohle	Michael	Freeland	Robert	Biosystems Engineering and Soil Science	Cotton Inc	9,738.01
		Margarita	Velandia	Agricultural and Resource Economics		
Leib	Brian	Freeland	Robert	Biosystems Engineering and Soil Science	Cotton Inc	16,516.00
		Main	Christopher	Plant Sciences		
		Gwathmey	Owen	Plant Sciences		

Job Opportunity

The University of Tennessee
Educational Advancement Program

TUTOR RECRUITMENT SPRING 2012



SUBJECT AREAS WHERE
TUTORS are NEEDED!

ACCOUNTING
CHEMISTRY
FRENCH & SPANISH
MATH
BIOLOGY
MICROBIOLOGY
STATISTICS
“OTHER”



- **PART-TIME “Employment”**
- **PAY RATE:** \$7.50 per hr. – Undergraduate Tutors
 \$8.50 per hr. – Graduate Tutors
- **Completion of an EAP Tutor Application is “REQUIRED”!**

**IF YOU ARE INTERESTED IN BECOMING A TUTOR FOR
THE **EDUCATIONAL ADVANCEMENT PROGRAM**,**

CONTACT:

Celeste Brooks, TUTOR COORDINATOR

brooksac@utk.edu

(865)974-7900

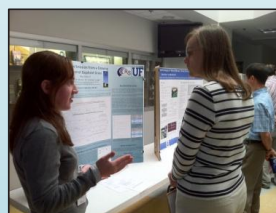
Undergraduate Research Opportunity



Agricultural and Biological Engineering at the University of Florida National Science Foundation (NSF)



Research Experience for Undergraduates (REU) In Water Resources – Summer 2012



We invite applications for an interdisciplinary research program in water resources from undergraduate students in their sophomore, junior, and senior years, majoring in engineering or related fields in science and math. Selected students will conduct hands-on research projects for *eight* weeks, involving field/laboratory experiments, theory, and computer modeling. The students will be distributed across Florida during the program. This unique program combines *research* and *extension experiences* in water resources to help convey research results for better water management.

Details of the program are available at: <http://www.abe.ufl.edu/reu>

- **PROGRAM:** June 11 – August 3, 2012. Includes all travel expenses, stipend, housing, and meals.
- **ELIGIBILITY:** US citizens or permanent residents who are in their sophomore/junior/senior year of study. Students at non-research institutions and those who are underrepresented in engineering and science are particularly encouraged to apply.
- **APPLICATION:** Form and instructions available online. Deadline of receipt is **Feb 1, 2012**.
- **CONTACT:** Mr. Daniel Preston (prestond@ufl.edu)

Upcomming Speaker



Dr. Guido Silvestri
Emory University School
of Medicine
How HIV causes AIDS:
a lesson from the monkeys



Monday Jan. 23, 3:30 PM
Walters Life Sciences Rm M309
Department of Microbiology
General Seminar

Micro 595 & 620

Upcomming Speaker

Department of Forestry, Wildlife, and Fisheries and Biological Engineering and Soil Sciences Invited Speaker



Birds, Bugs, Bunnies, and Bombs: Conservation and Research on Department of Defense Lands

Richard A. Fischer, PhD CWB
Research Wildlife Biologist
U.S. Army Engineer Research and Development Center
Environmental Laboratory
Vicksburg, MS

The United States Department of Defense (DoD) manages nearly 30 million acres of land for its primary mission of providing realistic training opportunities and military preparedness. The more than 400 military installations also harbor an incredible diversity of wildlife and natural resources. Compared to other U.S. federal land management agencies, DoD hosts a disproportionate amount of biological diversity due to a combination of factors, including DoD regulations, past and present land use, and location – installations are found in nearly every state and ecosystem, from deserts to tundra to coastlines. Sustaining the military mission and protecting biological diversity presents unique challenges and opportunities for military natural resource managers. While these may appear to be competing objectives, preserving the mission and biodiversity both depend on good stewardship of the land. This presentation will provide a range of examples of stewardship, restoration, and management of natural resources on military and civil works lands and waters. Partnering opportunities for collaborative research, as well as natural resources employment opportunities with the DoD will also be covered.

12:00 PM THURSDAY, JANUARY 26TH 2012
CENTER FOR RENEWABLE CARBON ROOM 103
Lunch will be provided